Please type a	ı plus sig	n (+) inside	this box	→	+

PTO/SB/05 (4/98)

Approved for use through 09/30/2000. OMB 0651-0032

Patent and Trademark Office: U.S. DEPARTMENT OF COMMERCE

Under the Paperwork Reduction Act of 1995, no persons are required to respond to a collection of information unless it displays a valid OMB control number.

# UTILITY

Attorney Docket No. PD-02W179

PATENT APPLICATION  First Inventor or Application Identifier Michael R. Beylor					
TRANSMITTAL  Title LOW PHASE-NOISE LOCAL OCILLATOR AND METHO					
(Only for new nonprovisional applications under 37 C.F.R. § 1.53(b)	Express Mail Label No. EV 29114239098 US				
APPLICATION ELEMENTS See MPEP chapter 600 concerning utility patent application content	Assistant Commissioner for Patents  ADDRESS TO: Box Patent Application  Washington, DC 20231				
1.  See Transmittal Form (e.g., PTO/SB/17) (Submit an original and a duplicate for fee processing)  2.  Specification [Total Pages] 18 (preferred arrangement set forth below)  - Descriptive title of the Invention  - Cross References to Related Applications  - Statement Regarding Fed sponsored R & D  - Reference to Microfiche Appendix  - Background of the Invention  - Brief Summary of the Invention  - Brief Description of the Drawings (if filed)  - Detailed Description  - Claim(s)  - Abstract of the Disclosure  Drawing(s) (35 U.S.C. 113) [Total Sheets]  4. Oath or Declaration [Total Pages]  a.  Newly Executed Combined Declaration and Power of Attorney  b.  Copy from a prior application (37 C.F.R. § (for continuation/divisional with Box 16 complete inventor(s) named in the prior application (so named in the prio	5. Microfiche Computer Program (Appendix)  6. Nucleotide and/or Amino Acid Sequence Submission (if applicable, all necessary)  a. Computer Readable Copy  b. Paper Copy (identical to computer copy)  c. Statement verifying identity of above copies  ACCOMPANYING APPLICATION PARTS  7. Assignment Papers (cover sheet & document(s))  8. 37 C.F.R.§3.73(b) Statement Power of (when there is an assignee)  9. English Translation Document (if applicable)  10. Information Disclosure Copies of IDS Statement (IDS)/PTO-1449 Citations  11. Preliminary Amendment  12. Return Receipt Postcard (MPEP 503) (Should be specifically itemized)  * Small Entity Statement(s) Status still proper and desired (PTO/SB/09-12)  14. Certified Copy of Priority Document(s) (if foreign priority is claimed)  15. Other:				
16. If a CONTINUING APPLICATION, check appropriate box, and supply the requisite information below and in a preliminary amendment:  Continuation  Divisional  Continuation-in-part (CIP)  Of prior application No:  For CONTINUATION or DIVISIONAL APPS only: The entire disclosure of the prior application, from which an oath or declaration is supplied under Box 4b, is considered a part of the disclosure of the accompanying continuation or divisional application and is hereby incorporated by reference. The incorporation can only be relied upon when a portion has been inadvertently omitted from the submitted application parts.  17. CORRESPONDENCE ADDRESS					
Customer Number or Bar Code Label (Insert Customer No. or Attach bar code label here)  or Correspondence address below					
Name Patent Docket Administration  RAYTHEON COMPANY					
Address Bldg. EO/E4/N119 P.O. Box 902					
City El Segundo Sta	te California Zip Code 90245				
Country United States of America Telephon					
Name (PrinvType) Thomas J. Finn Signature	Registration No. (Attorney/Agent) 48,066  Date \$ \ \ \ \ \ \ \ \ \ \ \ \ \ \ \ \ \ \				

Burden Hour Statement: This form is estimated to take 0.2 hours to complete. Time will vary depending upon the needs of the individual case. Any comments on the amount of time you are required to complete this form should be sent to the Chief Information Officer, Patent and Trademark Office, Washington, DC 20231. DO NOT SEND FEES OR COMPLETED FORMS TO THIS ADDRESS. SEND TO: Assistant Commissioner for Patents, Box Patent Application, Washington, DC 20231.



U.S. Patent and Trademark Office; U.S. DEPARTMENT OF COMMERCE Under the Paperwork Reduction Act of 1995, no persons are required to respond to a collection of information unless it displays a valid OMB control number.

FEE	TRA	N/	SM	ITT	AL
1	for F	Y	200	)3	

Effective 01/01/2003. Patent fees are subject to annual revision.

Applicant claims small entity status. See 37 CFR 1.27

TOTAL AMOUNT OF PAYMENT

(\$) 844.00	١

Complete if Known				
Application Number	NOT YET ASSIGNED			
Filing Date	HEREWITH			
First Named Inventor	Michael R. Beylor			
Examiner Name	NOT YET ASSIGNED			
Art Unit	NOT YET ASSIGNED			
Attorney Docket No.	PD-02W179			

METHOD OF PAYMENT (check all that apply)				FEI	E CALCULATION (continued)	
Check Credit card Money Other None 3. ADDITIONAL FEES						
Deposit Account:	Large E			Entity		
Deposit Fo. 2000		Fee (\$)	Fee Code	Fee (\$)	Fee Description	Fee Paid
Account Number 50-0888	1051	130	2051	65	Surcharge - late filing fee or oath	
Deposit Account Name	1052	50	2052	25	Surcharge - late provisional filing fee or cover sheet	
The Commissioner is authorized to: (check all that apply)	1053	130	1053	130	Non-English specification	<b></b>
Charge fee(s) indicated below Credit any overpayments	1812 2	2,520	1812	2,520	For filing a request for ex parte reexamination	<del></del>
Charge any additional fee(s) during the pendency of this application	1804	920*	1804	920*	Requesting publication of SIR prior to Examiner action	
Charge fee(s) indicated below, except for the filing fee to the above-identified deposit account.	1805 1	1,840*	1805	1,840*	Requesting publication of SIR after Examiner action	
FEE CALCULATION	1251	110	2251	55	Extension for reply within first month	
1. BASIC FILING FEE	1252	410	2252	205	Extension for reply within second month	
Large Entity Small Entity	1253	930	2253	465	Extension for reply within third month	
Fee Fee Fee Fee <u>Fee Description</u> Fee Paid Code (\$)	1254 1	,450	2254	725	Extension for reply within fourth month	
1001 750 2001 375 Utility filing fee 750.00	1255 1	,970	2255	985	Extension for reply within fifth month	
1002 330 2002 165 Design filing fee	1401	320	2401	160	Notice of Appeal	
1003 520 2003 260 Plant filing fee	1402	320	2402	160	Filing a brief in support of an appeal	
1004 750 2004 375 Reissue filing fee	1403	280	2403	140	Request for oral hearing	
1005 160 2005 80 Provisional filing fee	1451 1	,510	1451	1,510	Petition to institute a public use proceeding	
SUBTOTAL (1) (\$) 750.00	1452	110	2452	55	Petition to revive - unavoidable	<b></b>
2. EXTRA CLAIM FEES FOR UTILITY AND REISSUE	1453 1	,300	2453	650	Petition to revive - unintentional	
Fee from _	1501 1		2501		Utility issue fee (or reissue)	
Extra Claims below Fee Paid  Total Claims 23 -20** = 3 x 18. = 54.	1502	470	2502		Design issue fee	
Independent 3 - 3** = 0 × = 0.	1503	630	2503		Plant issue fee	
Multiple Dependent	1460	130	1460		Petitions to the Commissioner	
Large Entity   Small Entity	1807	50	1807		Processing fee under 37 CFR 1.17(q)	
Fee Fee Fee Fee Description	1806	180	1806		Submission of Information Disclosure Stmt Recording each patent assignment per	
Code (\$)	8021	40	8021	40	property (times number of properties)	40.00
1201 84 2201 42 Independent claims in excess of 3	1809	750	2809	375	Filing a submission after final rejection (37 CFR 1.129(a))	
1203 280 2203 140 Multiple dependent claim, if not paid	1810	750	2810	375	For each additional invention to be	
1204 84 2204 42 ** Reissue independent claims over original patent	1801	750	2801	375	examined (37 CFR 1.129(b))	
1205 18 2205 9 ** Reissue claims in excess of 20	1802	900	1802	900	Request for Continued Examination (RCE) Request for expedited examination	
and over original patent		1		230	of a design application	
SUBTOTAL (2) (\$) 18.00	Other fe					
**or number previously paid, if greater; For Reissues, see above	*Reduc	ed by	Basic F	lling Fe	subtotal (3) (\$) 40.00	)

SUBMITTED BY			(Complete (if applicable)
Name (Print/Type)	Thomas J. Finn	Registration No. (Attorney/Agent) 48,066	Telephone 520.794.7980
Signature	Jemmes 1		Date 8/6,03

WARNING: Information on this form may bec m public. Credit card information as huld n t b included on this form. Provide credit card information and authorization on PTO-2038.

This collection of information is required by 37 CFR 1.17 and 1.27. The information is required to obtain or retain a benefit by the public which is to file (and by the USPTO to process) an application. Confidentiality is governed by 35 U.S.C. 122 and 37 CFR 1.14. This collection is estimated to take 12 minutes to complete, including gathering, preparing, and submitting the completed application form to the USPTO. Time will vary depending upon the individual case. Any comments on the amount of time you require to complete this form and/or suggestions for reducing this burden, should be sent to the Chief Information Officer, U.S. Patent and Trademark Office, U.S. Department of Commerce, Washington, DC 20231. DO NOT SEND FEES OR COMPLETED FORMS TO THIS ADDRESS. SEND TO: Commissioner for Patents, Washington, DC 20231.

### "EXPRESS MAIL" mailing label number EV 291142390 US DATE OF DEPOSIT:

#### PD-02W179

#### LOW PHASE-NOISE LOCAL OSCILLATOR AND METHOD

by

## MICHAEL R. BEYLOR, WESLEY H. DWELLY, VINH N. ADAMS, DENNIS C. BRAUNREITER AND HARRY A. SCHMITT

I hereby certify that this paper or fee is being deposited with the United States Postal Service "Express Mail Post Office Addressee" service under 37 CFR 1.10 on the date indicated above and is addressed to MAIL STOP PATENT APPLICATION, Commissioner for Patents, P. O. Box 1450, Alexadria, VA. 22313-1450

Aline C. Zimmerman
(Typed or printed name of person mailing paper or fee)
(Signature of person mailing paper or fee)

Date of Signature